IN THE CLAIMS:

1. (Currently Amended) A projector comprising:

a light source for emitting beams of ~~lights~~ light;

a rod lens for receiving the beams of lights from the light source for making a distribution of the beams uniform;

a lens part for receiving the beams from the rod lens and focusing onto a plurality of focusing points; and

a polarization beam split array including a plurality of polarization split planes and a plurality of optical output planes, wherein the polarization split planes are slanted to receive from the lens part P-wave and S-wave beams, and are configured to form a triangle with the optical output plane at a central part of the polarization beam split array so that two slanted polarization split planes are symmetrically facing each other in an opposite direction, and each of the optical output planes has a half wavelength plate to output polarized beams having the P-waves or the S-waves rotated 90 ~~degree~~ degrees.

2. (Original) A projector as claimed in claim 1, wherein the light source is a lamp with an elliptic reflector.

3. (Original) A projector as claimed in claim 1, wherein an optical input surface of the rod lens has an area equal to, or greater than an area of the optical output surface.

4. (Original) A projector as claimed in claim 1, wherein the lens part includes at least one illumination lens.

5. (Original) A projector as claimed in claim 1, further comprising means between the light source and the rod lens for splitting at least one color beam from the beams of lights.

6. (Original) A projector as claimed in claim 5, wherein the means is a color wheel.

7-9. (Previously Cancelled).

10. (Previously Added) The projector as claimed in claim 1, wherein the polarization split planes transmit the P-wave beams and reflect the S-wave beams, and the half wavelength plates transform the transmitted P-wave beams into S-wave beams so as to polarize all the light beams into S-wave beams.

11. (Previously Added) The projector as claimed in claim 1, wherein the polarization split planes transmit the P-wave beams and reflect the S-wave beams, and the half wavelength plates transform the reflected S-wave beams into P-wave beams so as to polarize all the light beams into P-wave beams.

12. (Previously Added) The projector as claimed in claim 1, wherein two of the polarization split planes form a substantially continuous polarization splitting area around the central part.

13. (Previously Added) The projector as claimed in claim 1, wherein the triangle is integrally formed between two polarization split planes and corresponding optical output planes.

14. (Previously Added) The projector as claimed in claim 1, wherein two of the plurality of polarization split planes are substantially connected at the central part.

15. (Currently Amended) A projector, comprising:

a light source for emitting beams of lights;

an elliptical reflector for reflecting the beams of light toward a screen;

a rod lens ~~part~~ for receiving the reflected beams of light and making a distribution of the beams of light uniform ~~focusing onto a plurality of focusing points; and~~

an illumination lens part for receiving the beams of light from the rod lens, diverging the beams of light, and focusing the beams of light onto a plurality of focusing points; and

a polarization beam split array including ~~a plurality of~~ polarization split planes ~~and a plurality of optical output planes, wherein the polarization split planes are slanted to receive~~

~~from the lens part P-wave and S-wave beams, wherein each of two slanted polarization split planes of the plurality of split planes are symmetrically facing each other slanted in an opposite direction with a first end substantially connected at a center line of the polarization beam split array and a corresponding optical output plane correspondingly positioned at a second end.~~ respectively provided at the focusing points for receiving the beam of light including a P-wave and an S-wave from the illumination lens part and transmitting one of the waves as it is, and reflecting the other one of the waves, wherein a half wave plate is provided to each of the planes and one of the waves is transmitted therethrough for forwarding polarized beams of light in one direction, wherein the polarization split planes are slanted in opposite directions and meet at a center in symmetry in up/down directions to form a triangle with an optical output plane.